

Substitute for form 1449A/PTO

(use as many sheets as necessary)

Sheet	1	of	4
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Application Number	10/024164
Filing Date	18 December 2001
First Named Inventor	Talin et al.
Group Art Unit	2879
Examiner Name	
Attorney Docket Number	CR00-29

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5/19/04

¹ Unique citation designation number. ² See *Kinds of U.S. Patent Documents*. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English Language Translation is attached.



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Substitute for form 1449A/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/024164
		Filing Date	18 December 2001
		First Named Inventor	Talin et al.
		Group Art Unit	2879
		Examiner Name	
Sheet 2 of 4	Attorney Docket Number	CR00-029	

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
6	4	Xu et al., "A method for fabricating large-area, patterned, carbon nanotube field emitters," Applied Physics Letters, Vol. 74, No. 17, 26 April 1999, pp. 2549-2551.	
	5	Fan et al., "Self-oriented regular arrays of carbon nanotubes and their field emission properties," Science, Vol. 283, 22 January 1999, pp. 512-514.	
	6	Suh et al., "Highly ordered two-dimensional carbon nanotube arrays," Applied Physics Letters, Vol. 75, No. 14, 4 October 1999, pp. 2047-2049.	
	7	Hernadi et al. "Catalytic synthesis of carbon nanotubes using zeolite support," Zeolites 17, 1996, pp. 416-423.	
	8	Murakami et al., "Field emission from well-aligned, patterned, carbon nanotube emitters," Applied Physics Letters, Vol. 76, No. 13, 27 March 2000, pp. 1776-1778.	
	9	Ma et al., "Polymerized carbon nanobells and their field-emission properties," Applied Physics Letters, Vol. 75, No. 20, 15 November 1999, pp. 3105-3107.	
	10	Li et al., "Highly-ordered carbon nanotube arrays for electronics applications," Applied Physics Letters, Vol. 75, No. 3, 19 July 1999, pp. 367-369.	
	11	Terrones et al., "Controlled production of aligned-nanotube bundles," Nature, Vol. 388, 3 July 1997, pp.52-55.	
	12	Xu et al., "Controlling growth and field emission property of aligned carbon nanotubes on porous silicon substrates," Applied Physics Letters, Vol. 75, No. 4, 26 July 1999, pp. 481-483.	
	13	Tsai et al., "Bias-enhanced nucleation and growth of the aligned carbon nanotubes with open ends under microwave plasma synthesis," Applied Physics Letters, Vol. 74, No. 23, 7 June 1999, pp. 3462-3464.	
✓	14	Kind et al., "Patterned films of nanotubes using microcontact printing of catalysts," Advanced Materials, 11, No. 15, 1999, pp. 1285-1289.	

Examiner Signature		Date Considered	5/18/04
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	15	Nilsson et al., "Scanning field emission from patterned carbon nanotube films." Applied Physics Letters, Vol. 76. No. 15, 10 April 2000, pp. 2071-2073.	
	16	Kuttel et al., "Electron field emission from phase pure nanotube films grown in a methane/hydrogen plasma," Applied Physics Letters, Vol. 73, No. 15, 12 October 1998, pp. 2113-2115.	
	17	Ren et al., "Synthesis of large arrays of well-aligned carbon nanotubes on glass," Science, Vol. 282 6 November 1998, pp. 1105-1107.	
	18	Ren et al. "Growth of a single freestanding multiwall carbon nanotube on each nanonickel dot," Applied Physics Letters, Vol 75, No. 8 23 August 1999, pp. 1086-1088.	
	19	Pan et al., "Very long carbon nanotubes," Nature, Vol. 394, 13 August 1998, pp. 631-632.	
	20	Zhang et al., "A flat panel display device fabricated by using carbon nanotubes cathode," IEEE, 2001, pp. 193-194.	
	21	Zhong et al., "Large-scale well aligned carbon nitride nanotube films: Low temperature growth and electron field emission," Journal of Applied Physics, Vol. 89, No. 11, 1 June 2001, pp. 5939-5943.	
	22	Kim et al., "Growth and field emission of carbon nanotubes on electroplated Ni catalyst coated on glass substrates," Journal of Applied Physics, Vol. 90, 1 September 2001, pp.2591-2594.	
	23	Gulyaev et al., "Field emitter arrays on nanotube carbon structure films," J. Vac.Sci. Technol. B 13(2), Mar/Apr 1995, pp. 435-436.	
	24	Chernozatonskii, et al. "Nanotube carbon structure tips - a source of high field emission of electrons," Mat. Res.Soc. Symp. Proc., Vol. 359. 1995 Materials Research Society, pp. 99-104.	
	25	Su et al., "A scalable CVD method for the synthesis of single-walled carbon nanotubes with high catalyst productivity," Chemical Physics Letters 322, (2000), pp 321-326.	

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet	4	of	4	Attorney Docket Number	CR00-029
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b	26	Li et al. "Large-scale synthesis of aligned carbon nanotubes," Science, Vol. 274, 6 December 1996, pp. 1701-1703	
	27	Cassell et al. "Large scale CVD synthesis of single-walled carbon nanotubes," J. Phys. Chem. B. 1999, 103, pp. 6484-6492.	
	28	Cassell et al. "Directed growth of free-standing single walled carbon nanotubes," J. Am. Chem. Soc. 1999, 121, pp. 7975-7976.	
	29	Cassell et al. "Combinatorial optimization of heterogeneous catalysts used in the growth of carbon nanotubes," Langmuir 2001, 17, pp. 260-264.	
	30	Li et al. "Large-scale synthesis of aligned carbon nanotubes," Science, Vol. 274, 6 December 1996, pp. 1701-1703.	

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